

# CORE PRODUCT PORTFOLIO

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CUSTOMIZABLE CONVEYORS AND PRODUCT  
REDISTRIBUTION EQUIPMENT

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⊕ CORE PRODUCT PORTFOLIO

# STANDARD EQUIPMENT CUSTOMIZED FOR SUPERIOR RESULTS.

No two production lines are the same. Our engineering team excels at customizing our Core Product Line to best fit your specific production needs and objectives.

# Table of Contents

**03** Table Top Conveyor

**04** Modular Belt Conveyor

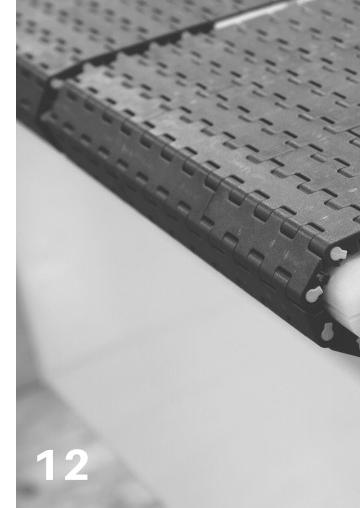
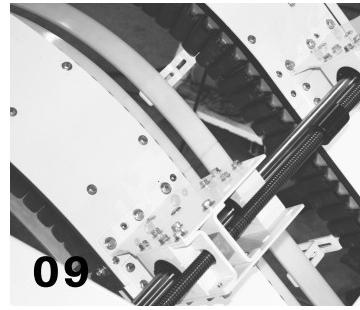
**05** Fabric Belt Conveyor

**06** Chain Driven Roller Conveyor

**07** Motor Driven Roller Conveyor

**08** Spiral Conveyor

**09** Gripper Conveyor



**10** Laner

**11** Helix Twist

**12** Dual Belt Rotator

**13** Pop Up Transfer

**14** Right Angle Transfer

**15** Sweep Transfer

**16** Starwheel

**17** Upender Arm



 **Product Handling  
Concepts**

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# TABLE TOP CONVEYOR

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SIMPLE. RELIABLE. FLEXIBLE.



When it comes to moving product from one location to another, it does not get simpler than a table top conveyor.

A table top conveyor chain is created by joining together a series of slats or links, similar to a bike chain. These linked slats are then guided along a path made by a series of wear strips, usually made of oil, impregnated wood, or ultra-high-molecular-weight polyethylene (UHMW). The strips are held in place by a metal frame which is supported by either the floor on legs or suspended from the ceiling on drop down hangers.

The simplicity of table tops makes it a very versatile chain for several other types of applications as well. You can use multiple lines on a large frame to create a single filer or extra space for product accumulation. More specialized variations of table top chain are used in manipulation devices such as grippers and helical twists.

# MODULAR BELT CONVEYOR

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YOU CAN GO YOUR OWN WAY.



The Modular Belt is a highly customizable conveyor chain. It is made by linking together plastic modules with rods. This kind of construction allows for a large variety of standard widths and even the ability to make custom widths if necessary.

There are two main categorizes of modular belts; straight running and side flexing. Straight running belts are not able to go around curves, but need less complicated frames to hold the belt due to their increased rigidity, and tend to be less expensive. Side flexing belts cost more and require more complicated supports and frames, but have discovered the wonderful ability to turn. Other options include inserts such as high friction top, cleats, or hold downs.

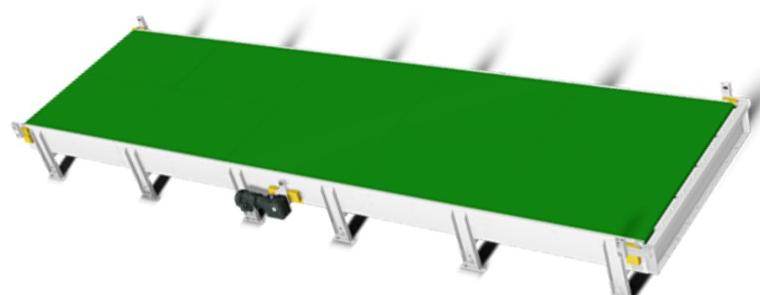
# FABRIC BELT CONVEYOR

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FROM THE GROCERY STORE  
TO THE FACTORY FLOOR.



Most people are familiar with fabric belt conveyors, as they are most often seen out in the wild of fitness centers and convenience stores. The fabric belt is supported completely by a steel frame and driven by a solid pulley. Tension is maintained by either an independent tension pulley or using an adjustable pulley on an idle end. Because each belt is uniquely manufactured, a fabric belt conveyor has the maximum amount of flexibility in length or width for any transport conveyor. A fabric belt is often called for when feeding product into particular machines due to specific friction requirements for those machines.



# CHAIN DRIVEN ROLLER CONVEYOR

MOVING THE BIG STUFF



Chain Driven Live Roller (CDLR) conveyor is made up of a series of rollers aligned inside two side frames. The rollers are then connected via sprockets and chain to a drive motor mounted to the side of the conveyor. These pulleys, being made of steel, are able to convey far heavier products compared to plastic based conveyors like table tops and modular belts. The down side of such a conveyor, however, is the relatively large gaps between the rollers limiting the size of the products that can be effectively conveyed.

Chain driven roller is most commonly used for moving already packaged cases or boxes of product towards the end of a production line leading into or out of palletizing equipment.

# MOTOR DRIVEN ROLLER CONVEYOR

ACCUMULATION!  
ACCUMULATION EVERYWHERE!



Motor Driven Roller (MDR) conveyor, like its simpler cousin chain driven roller conveyor, is assembled using a series of pulleys. These pulleys are then joined together using elastic bands. One roller in each of these series is internally driven and controlled independently of the other series. This way zones are created, which can start or stop independently of other zones. This is very useful when wanting to create accumulation for cases or other large product feeding equipment such as palletizers. With the zones being able to turn on and off independently zero pressure accumulation is possible, as well as merging of product lines without the need of clamps, stops, or metering belts..

**ZERO PRESSURE  
ACCUMULATION  
POSSIBLE**

# SPIRAL CONVEYOR

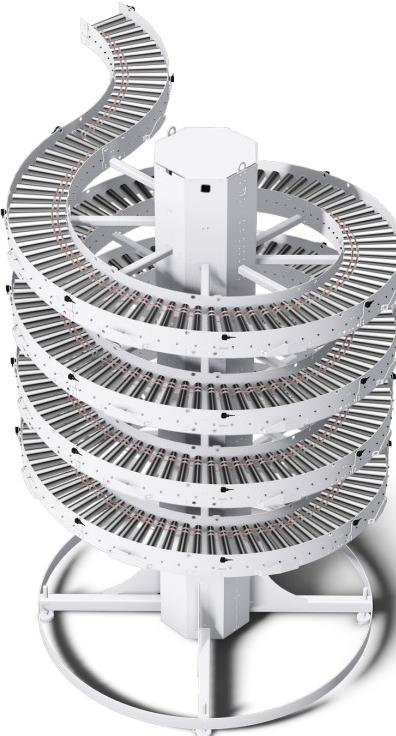
A GENTLER TOUCH.



Where grippers can't be used due to fragile product or where more accumulation is desired, spiral conveyors really fit the bill. Made of either modular belt for smaller products or motor driven rollers when accumulation is desired, a spiral wraps a large amount of conveyor in a small footprint.

## FAST FACTS

- Small Footprint
- Zero pressure accumulation (MDR)
- Product indexing (MDR)
- Belt types: Flat, High Friction
- Easy maintenance
- Modular construction
- Customizable tier height, angle and in-feed/exit configuration



# GRIPPER CONVEYOR

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## GOING UP?



Sometimes there is not enough space to use a standard incline or decline conveyor, even with cleats or high friction inserts. In these cases a gripper could be the best option to get your product where it needs to go.

Grippers operate by grabbing a product on its side using a table top conveyor chain with rubber bulb inserts. Once in its firm grasp, a gripper then moves the product at any angle required, even straight up or down. By making the spacing between the chains adjustable, a range of products sizes can be accommodated.

The unique operation of a gripper means that it can also function as a variety of devices. Using the spacing of the chains, a gripper can function as a vertical gate or bypass, allowing product to either be moved vertically or pass through. A "C style" gripper can be used as an upender, flipping the product 180 degrees before releasing it. For access requirements a humpback gripper will allow for personnel or equipment access while never letting go of the packaging.

# LANER

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RIGHT THIS WAY.



Wouldn't it be great if all your machines ran at the same rate down a single line? Sure would make the life of a plant manager or engineer simpler. Unfortunately that ideal is seldom reality. Often multiple pieces of one type of equipment are needed to keep up with another device up or downstream. Perhaps it is a log saw that can't keep up with a wrapper, or a bundler that needs to feed multiple case packers. These situations call for laners.

Laners offer the ability to redistribute a large volume of product at a rapid pace. Using either a series of pneumatic paddles or servo driven gates, a laner can take one or multiple lines of product and redistribute them to fit your production needs. If a device is down for maintenance or change over the product can be redistributed to other equipment. Or maybe different manufacturing machines are producing product at a different rate. A laner can balance those outputs so that the different packing operations all receive the same amount of product.

Laners are the traffic cops of the production line, making sure that everything keeps running smoothly.

# HELIX TWIST

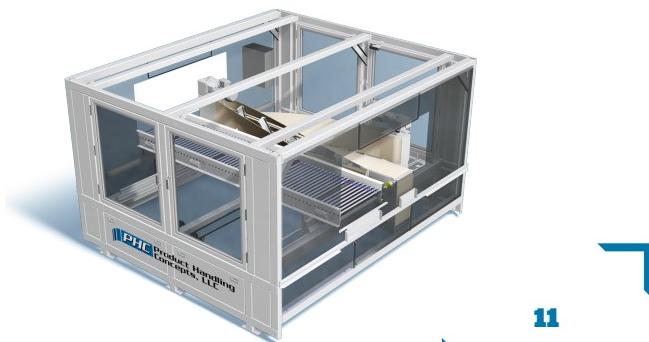
SOMETIMES YOU NEED  
SUPPORT.



There are several ways to rotate a product onto its side when being conveyed between equipment. For those products that need more support because they are fragile or can easily be tipped over, a helix twist is a good fit.

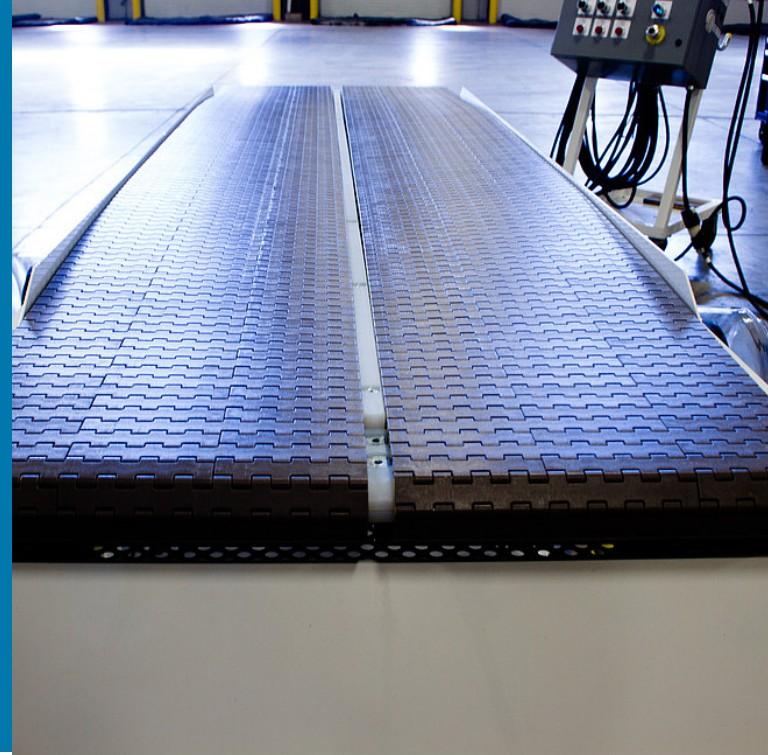
A helix twist can be made out of table top chain, rollers, or timing belts depending on the product needs. A timing belt will have the most control over a products orientation, grabbing it on all 4 sides, while rollers and table top allow for more flexibility. Helix twists can also be coupled with a section of bypass conveyor, allowing for quick and automated product line change over.

**NO GUIDES  
REQUIRED**

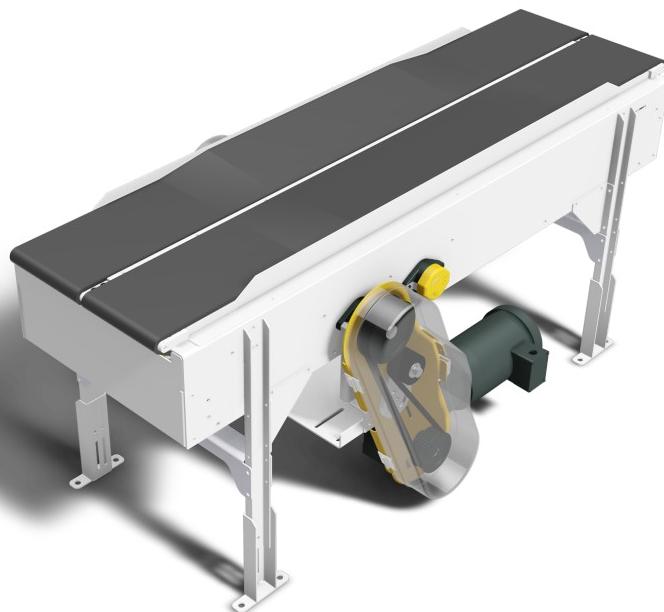


# DUAL BELT ROTATOR

GOING FOR A SPIN.



One of the most common types of orientation devices that Product Handling Concepts manufactures are dual belt rotators. Using two modular belts traveling at different speeds, a dual belt rotator can spin just about any product 90 or 180 degrees. Different sized products can be accommodated by modifying the speeds of the belts.

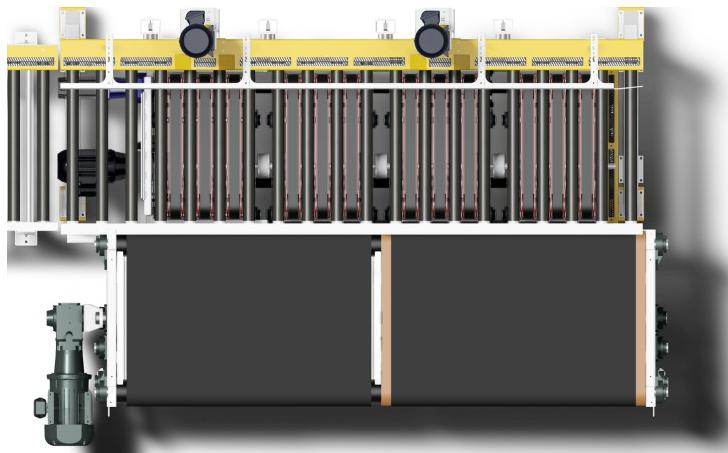


# POP UP TRANSFER

HEAVY DUTY.



Those gaps in the Motor Driven Roller (MDR) or the Chain Driven Live Roller (CDLR) conveyors come in handy when manipulating heavy loads. With the ability to fit in tight spaces, pop up transfers use belts mounted to thin frames to move product off the roller. Its perfect for sorting out those heavy loads that CDLR and MDR are so good at moving.

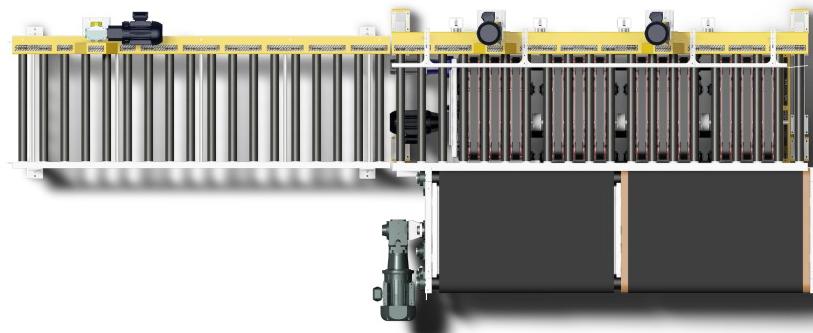


# RIGHT ANGLE TRANSFER

RIGHT OR LEFT.



When you need to change product orientation 90° or do not have the floor space for a traditional curve, you can take advantage of the situation with a Right Angle Transfer. By using side driven belts, pop-up belts or rollers, product flows seamlessly through these transitions. Right Angle Transfers can also be used to merge multiple lines into a single stream product flow.

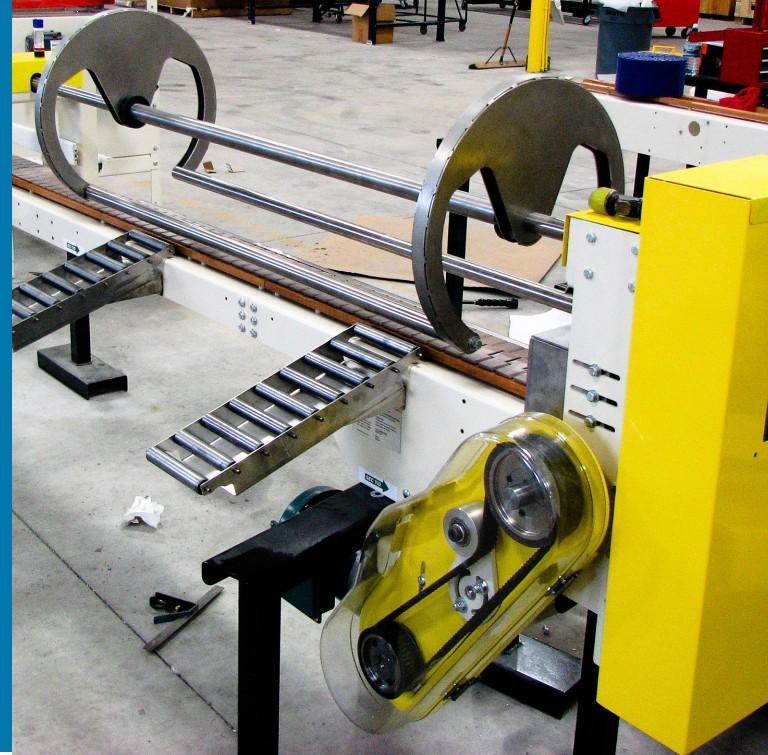


**ADJUSTABLE FOR  
MULTIPLE PRODUCT  
SIZES**

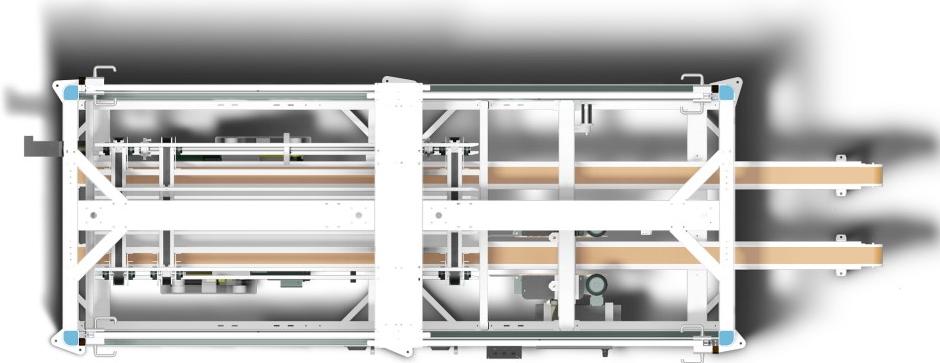
# SWEET TRANSFER

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PUSHING IT.



Not enough space to turn around? A sweep transfer can move your product with no need to curve the conveyor while also performing a 180 degree rotation. Maybe you just want to reject something that is too big for a blow off? Sweeps can help there too with fast and simple operation.



# STARWHEEL

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BOTTOMS UP!



When the top of your product needs to become the side or bottom a starwheel is a great solution. Starwheels grab a product from both sides and rotate it 90 degrees forward. Product Handling Concepts custom designs the profile of each star to match your product for reliable positioning and timing.



# UPENDER ARM

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CAN YOU GIVE ME A HAND?



Sometimes you don't need a piece of conveyor to upend your product. For larger boxes and bundled products an Upender Arm is a simple addition to a conveyor system, rotating the product around its access and flipping it onto its side.

